4507

Form 504

DEPARTMENT OF COMMERCE U. S. COAST AND GEODETIC SURVEY

State: SW. Alaska

1:-541

DESCRIPTIVE REPORT.

Hyd. Sheet No. 4507

LOCALITY

Alaska Pen

Nakchamik I., Atkulik I., Kak I.

1925

CHIEF OF PARTY

.C.L.Garner...

4507

DESCRIPTIVE REPORT to accompany

HYDROGRAPHIC SHEET NO. 2.

Vicinity of Nakchamik Island, Southwest Alaska.

Clem L. Garner, Chief of Party.

Instructions dated March 25,1925.

LIMITS: The work on this sheet consists of the inshore hydrography of Nakchamik,
Atkulik and Kak Islands. It connects on all sides with the ships work
of Hydrographic Sheet No."B".

. COAST LIME AND LANDMARKS: The coast lime and landmarks have been fully described in the report of the topographic sheet covering this area, and it is not considered necessary to cover this information at greater length.

DANGERS: The islands can anywhere be approached to the edge of the kelp line with safety. A few of the points have reefs making out from them, but they are all within a few hundred meters of the beach and are well marked with kelp at certain seasons of the year. In rounding all points vessels should keep at least half armile off as there is danger of pinnacle rocks.

SURVEY METHODS AND CONTROL: A twelve pound hand lead was used in all the work with the exception of a few deep soundings just off the north tangent of Nakohamik Island, and the few lines around Atkulik and Kak Islands. Lines were rum by both compass and ranges, and for the most part, in a direction normal to the coast line.

As nottime was available for the recovery of signals, located the previous season when the topography was accomplished, by plane table methods, it was necessary to locate by sextant cuts such natural objects as were needed to carry the hydrography forward. Difficulty was experienced here in obtaining good intersections because of the nature of the fixes and the fact that the only available signals for fixes were mountain tops, islands and other indefinate signals.

TIDES AND CURRENTS: The soundings on this sheet were reduced from Anchorage Bay tidal data. No current observations were made, but nothing was observed that indicated any unusual current.

BOTTOM CHARACTERISTICS: The bottom drops off quite regularly from the beach to the limits of the work, with the exception of a small area just north of the island where depths up to 164 fathoms were sounded. The bottom, for the most part, was rocky and hard sand, with the exception of the two anchorages described below.

ANCHORAGES: Two fair anchorages are found near Nakchamik Island; one, with nine fathoms of water on the Northwest side of the Island near signals (Red and Waterfall, affording protection from southeasters; and the second, with seven fathoms of water, on the west side offering protection from the northwest. The bottoms are sand and course gravel, and are but fair holding ground. Both the DISCOVERER and the Anne W. used these two anchorages, the DISCOVERER anchoring about 3/4 mile off shore in 18 to 20 fathoms of water and the Anne W about 1/4 mile off shore in 8 to 9 fathoms.

Respectfully submitted:

Approved and forwarded:

Chere Lymner ands.

Solet W Tongs

earls fully

STATISTICS SHEET to accompany

Hydrographic Sheet No. 2

NAKCHAMIK ISLAND

Date	I	etter	Volume	Positions	Soundings	Statute Miles	Vessel
1925						· · · · · · · · · · · · · · · · · · ·	
Aug	13	8.	1	143	1 85	23.5	Anne W.
71	14	Ъ	1	126	168	34.4	it it is
11	17	C	1	68	81	12.5	17 :1
Totals		3	1	337	4.34	70.4	Totals

Area in sq. statute miles - - 11

Division of Hydrography and Topography:

Division of Charts:

Tide reducers are approved in 4507 volumes of sounding records for

HYDROGRAPHIO SHEET NO.

C. L. Garner in 1925

Locality:

Chief of Party:

Chignik

Plane of reference is ft. on tide staff at

For reduction of soundings, condition of records satisfactory except as checked below:

- 1. Locality and sublocality of survey omitted.
- 2. Month and day of month omitted
- 3. Time meridian not given at beginning of day's work.
- 4. Time (whether A. M. or P. M.) not given at beginning of day's work.
- 5. Soundings (whether in feet or fathoms) not clearly shown in record.
- 6. Leadline correction entered in wrong column-
- 7. Field reductions entered in "Office" column.
- 8. Location of tide gauge not given at beginning of each day's work.
- 9. Leadline corrections not clearly stated.
- 10. Kind of sounding tube used not stated.
- 11. Sounding tube No. entered in column of "Soundings instead of "Romarks".
- 12. Legibility of record could be improved.
- 13. Romarks.

Chief, Division of Tides and Currents.

ADDRESS THE DIRECTOR
U. S. COAST AND GEODETIC SURVEY

AND REPER TO NO. 4-DRM

Sec. 15

DEPARTMENT OF COMMERCE ...

U.S. COAST AND GEODETIC SURVEY

WASHINGTON

March 22, 1926.

SECTION OF FIELD RECORDS

Report on Hydrographic Sheet No. 4507

Vicinity of Nakchamak Island, Alaskan Peninsula

Surveyed in 1925

Instructions dated March 25, 1925 (DISCOVERER)

Chief of Party, Clem L. Garner.

Surveyed by R. W. Knox.

Protracted, and soundings plotted by J. C. Partington.

Verified and inked by H. E. MacEwen.

- 1. The records conform to the requirements of the General Instructions except that no headings by compass were given, also in the case of stop soundings the records were incomplete as to time of start, stop and sounding.
- The plan and character of development fulfill the requirements of the General Instructions.
- 3. The plan and extent of the survey satisfy the specific instructions except that the lines should have been run in closer to shore in some of the bights especially those mentioned as anchorages.

Additional soundings should also have been taken off the north point of Nakchamik Island to develop better the 50 and 100 fathom curves.

- 4. The sounding line crossings as far as a comparison of adjacent lines is concerned are adequate.
- 5. The information is lacking in some places to permit of completely drawing the depth curves.
- 6. The field plotting was completed to the extent prescribed in the General Instructions and practically mone of the work had to be done over by the office cartographer.

7. The junction with H. 4499 is satisfactory. The gap between the two sheets due east of Nakchamek Island in approximately lat. 53° 21' has been taken care of on H. 4509. This sheet has not been verified as yet.

The junction with H. 4509 will be taken up in the review of that sheet.

- 8. No further surveying is required at the present.
- 9. The character and scope of the field work and the field drafting are very good.
- 10. Reviewed by A. L. Shalowitz, March, 1926.

DEPARTMENT OF COMMERCE

U. S. COAST AND GEODETIC SURVEY

* HYDROGRAPHIC TITLE SHEET

The finished Hydrographic Sheet is to be accompanied by the following title sheet; filled in as completely as possible, when the sheet is forwarded to the Office.

U. S. Coast and Geodetic Survey.

South West Alaska State Locality Nakchamik Island and Atkulik I, and Kak I. Scale 1.: 20,000 Protracted by J.C. Partingtonindings in pencil by J.C. Partington Inked by Verified by Records accompanying sheet (check those forwarded): Des. report, _O__ Tide books, __*_ Marigrams, __1_ Boat sheets, Data from other sources affecting sheet ROME.....

Remarks: